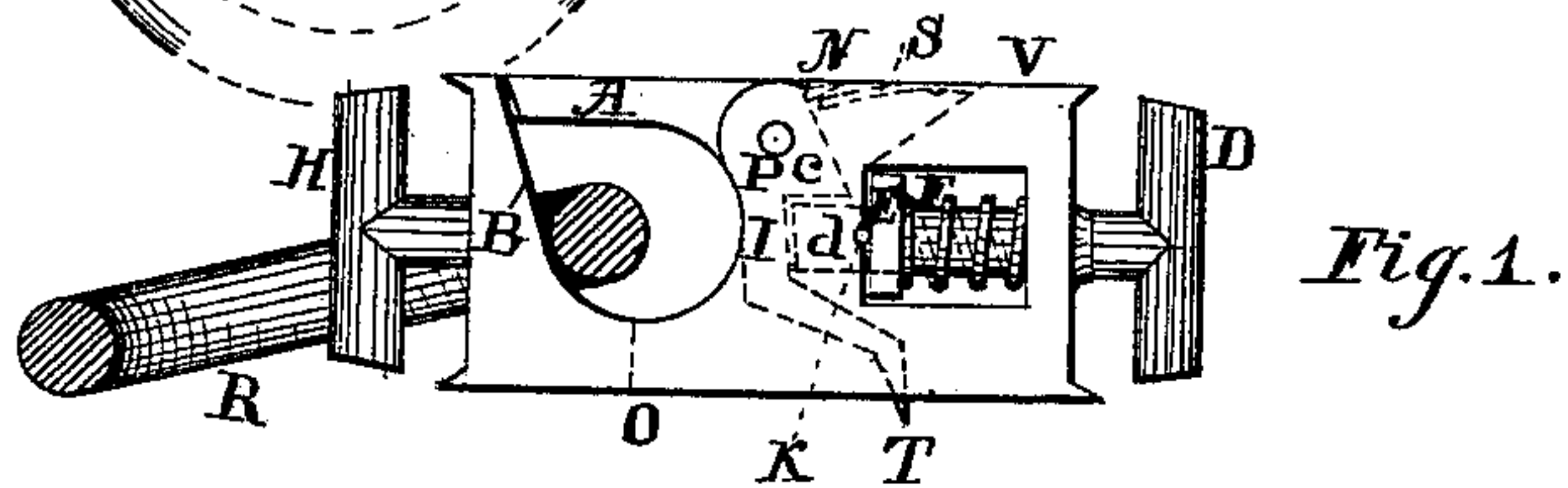
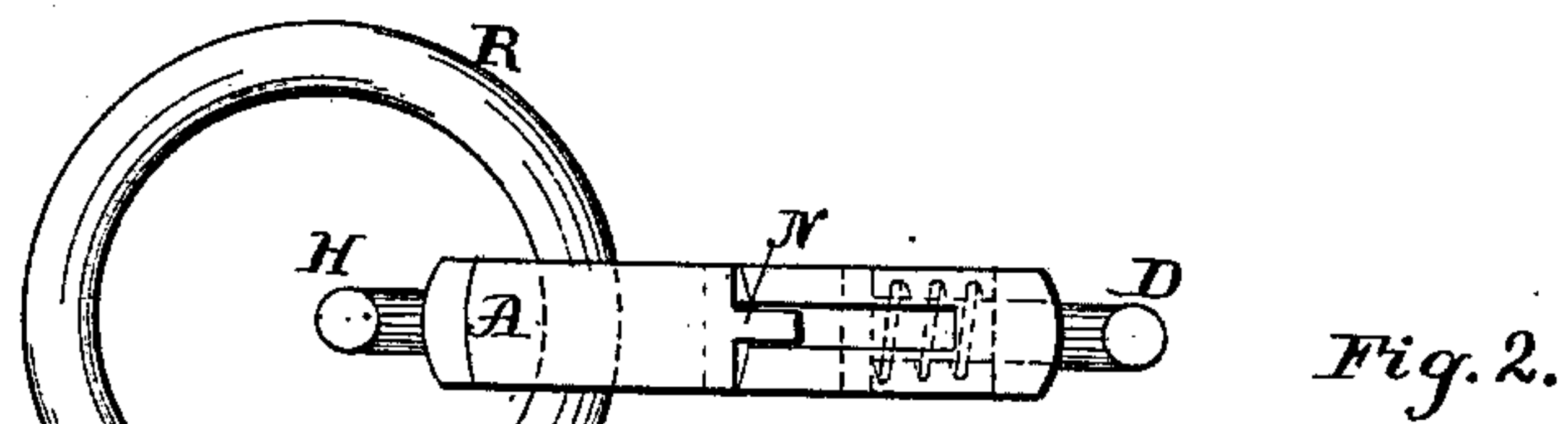
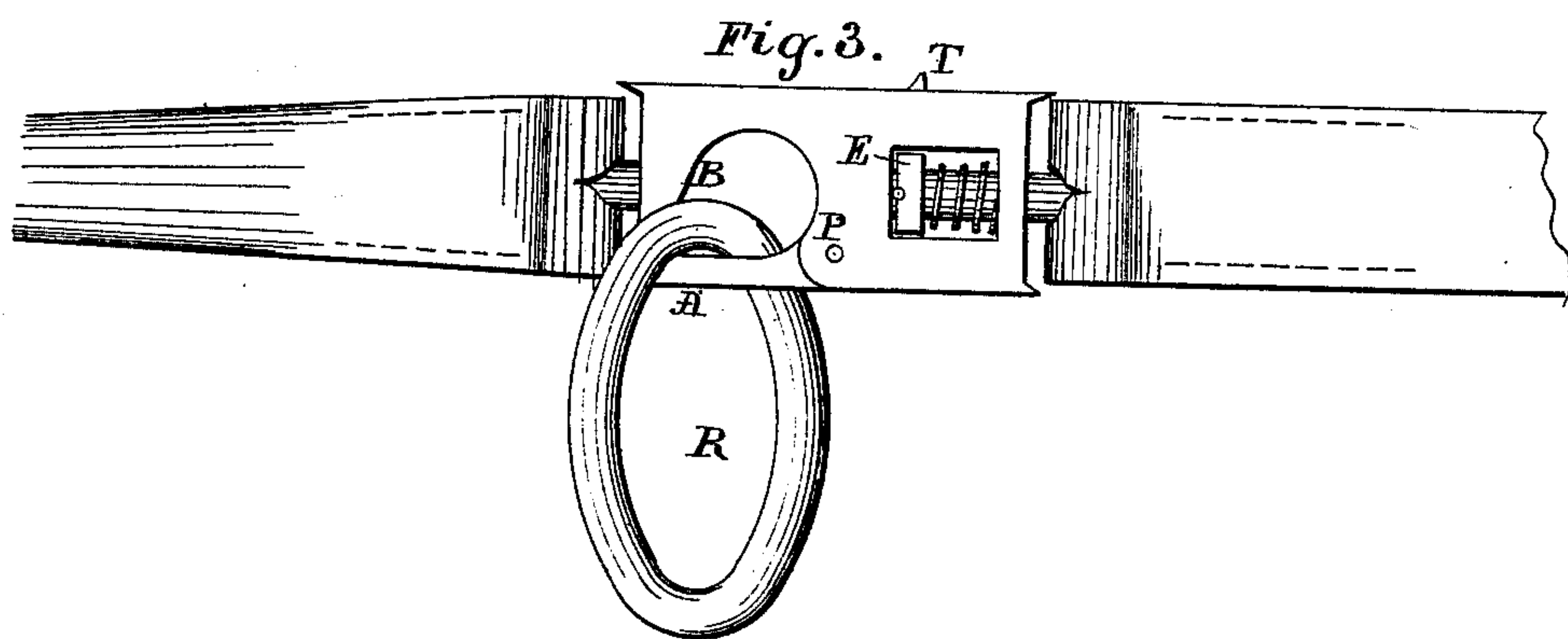


J. A. FIELD.
Device for Hitching Horses.

No. 214,245.

Patented April 15, 1879.



Witnesses:

S. D. Whitney.
A. D. J. Whitney.

Inventor:

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UNITED STATES PATENT OFFICE

JAMES A. FIELD, OF BELOIT, WISCONSIN

IMPROVEMENT IN DEVICES FOR HITCHING HORSES.

Specification forming part of Letters Patent No. **214,245**, dated April 15, 1879; application filed June 15, 1876.

To all whom it may concern:

Be it known that I, JAMES A. FIELD, of Beloit, in the county of Rock and State of Wisconsin, have invented an Improved Device for Hitching and Unhitching Horses, of which the following is a specification.

The object of my invention is to provide a hitching device which shall form part of the driving-rein, and so constructed that the horse may be unhitched from the hitching-post after the driver enters the vehicle by simply pulling or straining the driving ends of the reins at the same time that the horse is started forward.

To this end the essential feature of my invention may be stated to consist in an automatically locking and unlocking snap-hook or clip, embodied in the driving-rein between the bit and driving end, and constructed with a sliding spring-bolt or locking-key, which engages with the pivoted spring latch or "snap," to hold the same closed or locked while the horse is hitched thereby, which bolt is secured to one part of the rein, while the frame or fixed part of the device is secured to the other part of the rein in such manner that a pull or strain at the driving end of the rein withdraws the bolt, and permits the snap or latch to open to allow the free escape or detachment of the hitching ring or strap therefrom as soon as the horse starts forward.

The invention also consists in details of construction, as hereinafter set forth.

In the annexed drawings, Figure 1 presents a side elevation of my improved device detached from the rein, with the hitching-ring—supposed to be connected with the hitching-post—shown engaged therewith. Fig. 2 is a plan or edge view of the same; and Fig. 3 is an elevation, showing my device embodied in the driving-rein, of which a fragmentary view is given.

As will be observed from the drawings, my device forms a species of snap-hook of peculiar construction. The frame or fixed body of the device is, preferably, of flat rectangular form, and about the same thickness and width as the driving-rein, so that it may be embodied in the driving-rein, as seen in Fig. 3, and form an organized part thereof without projecting beyond the surface of the rein, and thus move

freely in the rings of the harness without meeting with any obstruction therefrom.

One end of the frame is formed with a T-shaped projection, H, solid therewith and of round section, as indicated, which is fixedly socketed in one end of the rein, preferably that part which extends to the bit, as shown in Fig. 1. This same end of the frame is also formed with a deep lateral recess, forming an eye, with which the hitching-ring R is engaged, as seen in Figs. 1 and 3, and this eye is closed by the pivoted spring latch or snap, A I T, to hold the ring engaged, which snap opens outward instead of inward, like ordinary snaps.

The latch or snap has the form of an elbow-lever, as shown, and is pivoted at P between the sides of the frame, with one arm, A, extending longitudinally and closing the entrance to the hitching-eye, as shown, while the other arm extends transversely through the hollow of the frame, and its mere extremity T protrudes slightly from the hollow at the opposite side of the frame, to permit the contact of the finger to raise the lever and open the snap when desired. A spring, S, pressing upward on a shoulder or projection near the pivot P of the snap-lever, tends to hold it constantly closed, but not rigidly so, as will be understood.

The transverse arm of the snap-lever, which lies within the hollow of the frame, is, however, formed with a square recess or shoulder, I, Fig. 1, which is engaged by the correspondingly square or flat extremity d of a sliding bolt or locking-key, E, at the opposite end of the device, which is capable of sliding in or out through a central bearing in the frame, and which terminates beyond the frame in a T-shaped projection or cross-bar, D, similar to that at the other end of the device, and which is also fixedly socketed in the other part of the rein, or that end which extends to the driver, as seen in Fig. 1.

A spring, F, encircles the bolt, and, pressing against a shoulder or nut, E, thereon, tends to keep the bolt pressed into constant engagement with the snap-lever to hold the same locked, as will be understood from Fig. 1. This nut or shoulder is square, and moves in a square slot in the frame, as shown, thus preventing the bolt from turning, so as to retain the parts in proper line with the two portions

of the rein parallel with each other and with the sides of the device.

It will thus be seen that while the bolt remains in engagement with the snap-lever it is impossible to open the snap to disengage the hitching-ring without breakage of the parts. When the bolt is withdrawn, however, the snap is free to open when any force is applied to the same; hence, to hitch the horse, it is only necessary to withdraw the bolt by straining the rein lengthwise, and then forcing the snap open by the fingers, after which the hitching-ring may be slipped into the eye of the device, and will then become immediately retained, as soon as the parts are released, by the snap closing upon it and becoming rigidly locked on the return of the parts to their position.

It will now be observed that it will be impossible for the horse to release himself by his own efforts, as this can be done only by a strain directly applied lengthwise through the reins. Furthermore, the efforts of the horse to free himself causes the hitching-ring to assume a position opposite to that in Fig. 1, and to come in contact with the transverse arm of the snap-lever at the curved side of the eye, a part of which is curved to correspond with the eye, as shown, so that this only tends to hold the snap closed the more securely. When the driver enters the vehicle, however, and lifts and strains the reins to start the horse forward, the bolt becomes withdrawn, the snap opened, and the horse thus unhitched without any further effort.

The advantage of my device, as will be obvious, consists in its simple and automatic operation, and in the fact that the unhitching is effected after the driver is seated in the vehicle, and by simply starting the horse forward under the stress or direction of the reins.

Where the horse is unhitched before entering the vehicle, as usual, the horse often immediately starts off, which is embarrassing to the driver—especially if a lady—but which is completely obviated by my invention.

It will be seen that the front part of the hitching-eye is formed with a slanting surface, B. When the unhitching action takes place, the hitching-ring R comes in contact with this slanting surface, and therefore moves out of the eye with greater certainty and ease than would be the case if the surface were straight, as will be readily understood.

What I claim is—

1. A locking and unlocking snap-hook, adapted to be embodied in a driving-rein, and to operate substantially as described, formed by the combination, with a sustaining frame or body provided with an attaching recess or eye, of a pivoted externally-opening snap, A I T, with a sliding bolt or locking-key, d E, which engages with the snap to hold the same closed and locked, and which permits the opening thereof when withdrawn, substantially as and for the purpose set forth.

2. The snap-hook, substantially as shown and described, provided with T-shaped ends H D, and adapted to be applied to a driving-rein for the purpose of releasing the hitching device, substantially as set forth.

3. An unhitching device constructed substantially as described, and adapted to be embodied in a driving-rein, with its snap or hook arranged to open outwardly, and its attaching-eye formed with a slanting surface, B, inclining toward the opening of the eye, substantially as set forth.

JAMES A. FIELD.

Witnesses:

SETH D. WHITNEY,
ADELINE D. T. WHITNEY.